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THORNSTEIN VEBLEN AS AN ECONOMIC THEORIST

Kenneth J. Arrow

Harvard University

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Thornstein Veblen is known as an iconoclast and critic of theory. It is not generally recognized to what extent he in fact evolved theories of his own, theories which were a development of neoclassical economics and precursor of later developments. This paper sketches his theories of the firm, of cyclical fluctuations, and of economic development.

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Harvard University 1737 Cambridge Street, Room 404 Cambridge, Massachusetts 02138

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THORSTEIN VEBLEN AS AN ECONOMIC THEORIST

Kenneth J. Arrow INTRODUCTION

The intellectual environment at Columbia University when I was a graduate student in 1940+1942 was far different from that in which the modern graduate student in economics finds himself. Neoclassical price theory now holds pride of place, as all student will acknowledge, some joyfully, some ruefully. But at Columbia at that period there was no required course in price theory. Indeed there was no course at all offered which gave a systematic exposition of microeconomics, except for Harold Hotelling's one term offering of mathematical economics, the content of which would today be more or less standard for a general course but which was then regarded as highly esoteric indeed. The one required course which was most nearly equivalent to price theory was a course on the history of economic thought, where the lecturer gave potted summaries of everyone from the mercantalists on. Walras was barely mentioned and certainly was much less prominent than H. J. Davenport. Keynes was not mentioned (for that matter the General Theory was not mentioned even in the course on business cycles, though there were some glancing references to the <u>Treatise</u> on <u>Money</u>).

But the work of Thorstein Veblen was indeed prominently displayed in the course on economic thought, and it was no accident. The corrosive skepticism of Veblen towards "received" theory had,

This is the text of the John R. Commons Lecture for 1973, delivered under the sponsorship of Omicron Delta Epsilon at the Annual Meeting of the American Economic Association of 1973).

belatedly and even posthumously, undermined the never-very-secure hold of neoclassical thought on teaching of American economics.

Of course he was not alone in effecting the change; the more benign but equally negative judgements of John R. Commons, In whose name we are gathered, shaped a generation of economists trained under him at the University of Wisconsin. At Columbia the channel of influence was Wesley C. Mitchell, creator of the National Bureau of Economic Research. His version of the attack upon neoclassical economics was an insistence on the large scale accumulation of data. It was in large part his direct influence plus the general background created by Veblen and Commons that led to the subordination of price theory at Columbia.

But even apart from the influence on formal training, Thorstein Veblen's ideas pervaded the intellectual culture. For many, no doubt, Veblen's own special style contributed to the dissemination of his ideas. The style and the content were inseparable. The most prominent characteristic was irony. Nor for him, on the one hand, the studious avoidance of loaded statements and the planned, plodding sentences of economists aspiring to be scientists; but on the other hand, not for him the polemical style and the overt anger at the injustice of the world to be found in Marx and more especially in the later Marxists. The world is indeed full of injustices, and the writings of economists full of attempts to disguise them; but these propositions are causes for laughter and scorn, not for agitation. Nothing is more

characteristic than his free use of words with high value loading, the implications of which are always immediately di claimed and unconvincingly apologized for. Perhaps the flavor of his prose can be best brought out by means of a long quotation, his reflections on the future of economics at the 1925 meeting of the American Economic Association.

"Therefore any distinctive or peculiar traits to be looked for in the science, in the way of scope and method, in the range of its inquiry and the drift and bias of its guiding interest, its logic and its data, will be due to arise out of those characteristic habits of thought that are induced in the incoming generation of economists in the course of that habituation to which they will have been exposed during the period of their growth and adolescence and during those marginal periods of waning flexibility that make up the initial phase of adult life ... In some substantial, perhaps critical and decisive, respects, therefore, these incoming economists will have the advantage over the passing generation that habitually inures to late-comers. Loosely, the events current during the next quarter-century are due to be made up and handled by them in the terms and with the preconceptions that have been carried over out of the past quarter-century; instead of those more archaic holdovers of knowledge and belief out of the nineteenth century with which the passing generation of economists have gone to their work. ... Under these circumstances, it is to be presumed that a sort of effectual discrepancy is again to be looked for between the working catagories and formulas employed by economists, on the one side, and the current exigencies of economic life, on the other side; a discrepancy which should be appreciably more pronounced in this calculable future of the science than at any period in the past, and answering to the more appreciable interval of lag to be looked for, due to the swifter run of events." 2

As in any writer from the past, certain concerns and concepts that now seem somewhat unusual are in fact reflections of the era rather

[&]quot;Economic Theory in the Calculable Future," in T. Veblen, Essays in Our Changing Order (L. Ardzrooni, editor), New York: Viking Press, 1954, pp. 4-5.

than of the man. Darwinism had its potent influence; evolutionary concepts, biological factors, and, perhaps a little more shocking to us, race, all find emphasis. That different races have different intellectual and social characteristics was accepted by him as simple fact. We also find considerable interest in the work of Karl Marx.

But among the various intellectual connections that Veblen had, the one I want to stress today is his link with neoclassical economics and his own contributions as an economic theorist. Veblen obviously had read a great deal of the new concepts of neoclassical economics and understood them very well. He referred repeatedly to Marshall, to John Bates Clark, and to his good friend, Davenport. He reviewed Irving Fisher's The Nature of Capital and Income and The Theory of Interest, but these appeared after Veblen's own contributions to capital theory. As will be seen, his views did not take into account the lesson of Fisher's earlier Appreciation and Interest, that anticipated inflation affects interest rates.

His knowledge was not necessarily all that it could be by modern standards. The twin pillars of neoclassical doctrine are the principle of optimization by economic agents and the coordination of their activities through the market. On the first, he understood the neoclassical position very well indeed and ridiculed it unmercifully, most especially in his review of John Bates Clark's work. He introduced a theme that has been stressed more recently by Herbert Simon and Richard Cyert: the requirements for optimization impose

vastly greater demands on the calculating power of individuals than can be met, and too little attention is paid to role of habit in individual decision making.

Veblen seemed to me less sure with regard to his understanding of market forces. He's not entirely consistent. At times he recognizes a tendency towards equalization of rates of return in different industries. But at other times he seems blind to the theoretical issues.

With this brief statement of Veblen's intellectual background,
let me turn to his positive contributions as a theorist. The Theory of
the Leisure Class is of course a contribution to the theory of
consumption and one which has influenced even formal theorizing from
time to time. But it is so familiar that I think it would be a
waste of time to discuss it. Let me instead turn to other works
which seem to be little noticed and yet contain theoretical
propositions of very considerable interest.

VEBLEN'S THEORY OF THE FIRM AND OF CAPITAL

The first of these is the <u>Theory of Business Enterprise</u>³. The controlling vision is a contrast between business enterprise, seen as profit making, and the machine process which controls production. The machine process, it is said, sets the tone for all modern industry. It requires for its development and induces in its practioners new modes of thought and behavior. It stresses the functional, the

T. Veblen, The Theory of Business Enterprise. New York: Scribner's, 1904.

useful, the matter of fact view of life. But the businessmen, whose decisions control the operation and plans, in effect reduce the possible productivity. Concretely, their search for individual profit maximization may prevent the realization of economies of scale. It is for this reason that mergers tend to be applauded (it must be recalled that this was written just after the great years of mergers.) The role of bankers in promoting these mergers is given the usual oblique criticism.

He is at one with the neoclassists in his view of business motivation: "The motive of business is pecuniary gain, the method is essentially purchase and sale. The aim and usual outcome is an accumulation of wealth.".

But, Veblen distinguishes sharply between vendibility and serviceability, between private and social product as we would say today. Veblen's views on the effect of market structure on this divergence are rather the opposite of those held by the more rigidily neoclassical economists; imperfect markets where there is close personal contact between buyer and seller, as in the days when handicrafts dominated, constitute a restraint on dishonesty and on poor quality of workmanship. The impersonal relationships characteristic of modern markets, where the machine process of production dominates, imply much more possibility for irresponsibility on the part of sellers. Veblen does not address himself to the argument that would

The Theory of Business Enterprise, Page 20.

be advanced by a competitive theorist: that there will be competition in the quality dimension

and that the protect∈ markets characteristic of personal relations may shelter incompetence and poor quality.

Indeed the drift of Veblen's whole argument here assumes monopoly. But Veblen in fact recognized what we would now call monopolistic competition, a recognition by one seller of imperfect substitutes for his product, and the consequent constraint on his profit possibilities. Indeed Veblen puts great stress on product differentiation as an economic strategy and recognizes that trademarks, brand loyalty, advertising and other selling costs are significant elements of competition. These expenditures, of course, can be regarded as wastes; they yield indeed a competitive advantage but no social advantage.

Competitive capital markets give rise in Veblen's model, as in the neoclassical, to the valuation of firms by capitalization of their earning power. In particular, the monopoly power obtained by product differentiation and similar tactics is capitalized; it is in fact what is called "good-will" in accounting practice. Veblen makes the interesting suggestion that as firms grow larger, the conditions of competition in the capital markets may break down, and there may fail to be a suitable means of capitalization. He does not however follow up the suggestion.

Into this model of firms and of capital values, Veblen introduces the possibility of borrowing and lending. He starts off with an impeccable neoclassical proposition: competition brings the rate of earnings into equality with the rate of interest. But, argues Veblen, borrowing in fact conveys to a firm only a differential advantage. The total earnings or at least the total output of the industry does not increase. The language at this point is by no means thoroughly clear. Apparently what is meant is that the influx of loan capital into an industry drives prices up as a result of the increased capitalization. He asserts that "business capital" represents more than material capital.

The divergence from neoclassical thinking here is strong. We would usually suppose that borrowing represents or permits an addition to real capital in the industry and therewith to higher net productivity. Veblen indeed suggests that output may rise, but for a different reason; he considers that the rise in prices may have a psychological effect on entrepreneurs and lead to a higher utilization of the existing stock of physical capital. At some points he recognizes that credit may be a transfer of the lender's wealth. He even notes that the extension of credits results in transferring assets from lower to higher value uses and thereby increased productivity, but he dismisses this effect as unimportant. Instead he argues that there will be no net increase in wealth if the credit arises from a fractional reserve banking system, so that it is not based on a transfer

of wealth. He adds that even if the credit is based on real property, the net effect might not be useful for production, for all the reasons that he has given before.

Veblen included stocks as a part of loan capital. He regards the stockholders, then, as separated from the firm and related to it rather as creditors are, than as owners are. He anticipated here clearly the managerial theories of the firm which A. A. Berle and G. C. Means were to make so famous years later, and which have now been pursued by R. L. Marris and others. Veblen even went so far as to identify the common stock with "good-will", the going value of the firm to the extent to which it is above and beyond the value of the physical assets. However, this identification does not seem essential to his argument.

In historical terms, he saw the focus of the economy, or more precisely, the business world, as shifting from the goods market to the capital market. Vendibility has replaced serviceability, in determining the sale of goods, but now, says, said Veblen, we have a new development: vendibility of corporate capital replaces that of goods. One is irresistably reminded of Keynes's comment, "When the capital development of a country becomes a byproduct of the activities of a casino, the job is likely to be ill done."

A. A. Berle, Jr., and G. C. Means, <u>The Modern Corporation and Private Property</u>. New York: Macmillan, 1932. <u>The Economic Theory of 'Managerial Capitalism</u>.

J. M. Keynes, The General Theory of Employment, Interest and Money, New York: Harcourt, Brace, 1936, p. 159. The whole of Chapter 12 in fact bears an extraordinary resemblance to Veblen's discussion of capital.

It may be remarked that Veblen's words, written at the height of merger movement around 1900, might have seemed equally appropriate in the late 1920's or again in the recent great wave of conglomorate mergers.

The vendibility of capital in Veblen's sense is in the interest of the managers, not necessarily the stockholders. There is in fact a great incentive for managers to spread misinformation about their firms. Just as firms in selling goods use monopoly power and persuasive methods to create earnings which can be capitalized as good-will, the manager seeks to use the same tactics in selling insecurities. "It [good-will] is of a spiritual nature, such that, by virtue of the ubiquity proper to spiritual bodies, the whole of it may undividedly be present in every part of the various structure which it has created."

THE THEORY OF BUSINESS CYCLES

Chapter VII of The Theory of Business Enterprise is called,
"the theory of modern welfare." What it deals with is what was called
in Veblen's time, Crises, Prosperity and Depression. His theory of
the business cycle stems directly from his proposition that business
capital differs from productive capital. The course of a boom is
marked by growing accumulation of debt as business capital expands.
This process however, in Veblen's view, is unstable. If the lenders
begin to infer that there has been over-capitalization, loans are
called or not renewed. This effect is cumulative since the calling in
of some loans makes others more doubtful than they were before.

⁷ The Theory of Business Enterprise, p. 173.

Since the real assets underlying the debt structure are inadequate, the effect on the business structure as a whole is that familiar in a run on a bank.

It is perhaps worthy of remark that Veblen's picture might be valid even if all loans were accompanied by a corresponding investment in real terms; all that would be required is that the maturity structure of money loans be shorter than that of the underlying real investments.

To continue with Veblen's argument, his picture of a "crisis" is rather different than our post-Keynesian view of a recession. There is no emphasis on movements in real terms. On the contrary, "the shrinkage incident to a crisis is chiefly a pecuniary, not a maturity shrinkage." But Veblen is not entirely consistent on this point.

When he discusses prosperity, which he always associates with a rise in prices, he speaks of "gains...in aggregate material wealth" and of positive effects on employment. These are attributed to psychological factors, the presumed positive impact of rising prices on entrepreneurial motivation. The last few years, of course, cannot look to be a very good verification of this proposition.

As may be inferred from this account, debtors and creditors alike are assumed to be subject to money illusion; they do not adjust their expectations to changing prices but project constant prices for the future.

In what was probably a relatively new observation, Veblen put great emphasis on the possibility of depression, that is a prolonged

period of relatively dull business, a time of unemployment of both plant and men persisting over a period of time. This might be taken to be an anticipation of Keynes's underemployment equilibrium, though the description scarcely falls into an equilibrium mold. fundamental cause, according to Veblen, is that older firms tend to become over-capitalized relative to newer ones. Veblen gives two reasons for the superior competitive power of new firms. One is that they may be created in periods of lower interest rates and hence require lower rates of return to justify themselves. A second explanation is that the course of technological progress in newer firms will always be able to drive down the rates of return on old assets. As a result, there always tends to be a large sector of industry with lower than anticipated rates of return; if financed out of borrowed capital, this means lower than normal rates of return on owned capital. Veblen never assumes, as many modern models do, that technological progress will be anticipated by the investor; and he seems to assume that only new firms will be able to take advantage of new technology.

The argument is that the depressed state of the rate of return on capital on the average acts to discourage investment. The logic to this is certainly unclear, since the marginal investor is presumably not affected. But Veblen's argument is pyschological:

"Depression is primarily a malady of the affections of the businessman." I suppose one could set up a formal model in which the return

foreseen by a new investor is based on the average for the market; that is he does not realize that his technologically progressive machines will have a higher rate of return than older ones. Veblen's world is certainly one of limited information.

With regard to policy, Veblen argues that the maintenance of prosperity will require increasing stimuli. Therefore like Malthus before and Keynes after him, he regards "wasteful expenditures" as a social good. Veblen foresaw consolidation of industry as a means for avoiding the downward drift of capitalization, but that consolidation could never be complete: "When the last step in business coalition has been taken, there remains the competitive friction between the combined business capital and the combined workmen." The flavor of Marx is unmistakable; indeed the whole discussion of depression is reminiscent, even to some extent in detail, of the declining rate of profit in Marxist theory.

THE ADVANTAGES OF BACKWARDNESS

From The Theory of Business Enterprise, let me turn to another work of Veblen's which has advanced theoretical propositions of great interest, Imperial Germany and the Industrial Revolution.

The book is indeed an examination of the interaction between politics and economics in imperial Germany but it is based on certain propositions set forth fairly explicitly.

The Theory of Business Enterprise, p. 266.

T. Veblen, Imperial Germany and the Industrial Revolution. New York: McMillan, 1915; new edition, New York: Viking, 1939.

Perhaps the most interesting of these is the idea that a country which industrialized late has some advantages. It can introduce new and more advanced forms of capital goods than its older rivals. It will be noted that in Theory of Business Enterprise, Veblen made similar observations about old and new firms.

Why is this so? Why could not England, for example, introduce the most advanced capital goods as developing technology made them available? The answer I think must be found in the fact that much capital investment is by no means reversible. Once in place, many capital goods have no alternative use. Other capital goods could conceivably be used elsewhere or for other purposes but only for very high costs. It follows then that from an economic point of view, such goods become free goods in the short run. Hence, it may not pay to scrap these goods when better ones are available, even though the latter are more efficient. Clearly, some such proposition is true of such large and relatively permanent undertakings as railroad track. It may even apply to machines of very considerable durability certainly old, inefficient factory buildings may continue to be used because they are now of no alternative costs to their owners.

Consider the following problem. Suppose the installation of one unit of capital (measured in terms of foregone output) yields a perpetual return of \underline{a} units of output if installed now, but if the installation is delayed to year capital T, so that a better machine will be available, it would yield a perpetuity of \underline{a} ' > \underline{a} then. It

would follow then that of two countries equally endowed with capital initially, the one which delayed the starting of production will have a higher income.

In Veblen's model, there is no forecasting of technological change. The earlier entrant confidently believes that there will be no better way to invest his resources later on. But, interestingly enough, it can easily be true that even if the early entrant correctly forecasts future growth and productivity, it might still elect to invest early. For, let r be the rate of interest by which all future returns are discounted. Then a country which is aware that there will be technological progress will be faced with a choice of investing now or waiting till year T. If it did the first, the present value of its future income will be a/r; if it waits the present value discounted to year T will be a'/r, but then the value discounted back to the year 0 will be e^{-rT} (a'/r), which might very be < a/r. Hence an early entrant might well rationally choose to invest now even knowing that there will be technological change, and yet it will be true that when observed later, it will have a smaller national income.

Obviously this mechanism can explain why later arrivals may rank higher in GNP computations than early ones, but it does not prove that in the history of the country as a whole backwardness was an advantage.

The example I gave, which involved a discontinuous jump in productivity, might be judged a bit artificial. But the phenomenon

is true in general. If the productivity of capital rose steadily ac a rate p, it is still not optimal to postpone any unit of investment if r > p. Yet clearly the output will eventually be smaller than that of a late entrant.

This model is obviously grossly oversimplified in several directions. For one thing, an early entrant not only makes early investments but also makes later investments out of the proceeds of the earlier investments. This process could be analyzed along the lines of conventional growth models of the vintage type, where the later investments simply enter into new production processes which are additive with the old. Late entry may still be advantageous (measured in terms of ultimate income) provided the gain in productivity at a later point more than outweighs the effect of saving; the outcome depends on the values of the parameters.

But Veblen's own words suggest an alternative hypothesis of the interrelations between old and new investment. Suppose later investment is complementary to the earlier, as railroad engines to existing track or farm machinery to existing plots of land. Then the early investment influences the productivity of future ones. If the railroad track is narrowgauge, then all future engines have to conform in the absence of expensive alterations. Similarly, as Paul David has argued, if land has been plowed for hundred of years in a way which makes it suitable for hand reaping, it will not be suitable

for machine reaping. 10

I think therefore that Veblen's intuition has not yet been formally modeled in modern growth theory; it is clearly going to be a hard though I would hope rewarding task.

As Veblen makes clear, however, even these material and tangible examples intend to serve as parables of something else, the role of intangible capital, the whole social and cultural background in general. These aspects are in the highest degree irreversible investments, and additions to the tangible capital stock can be thought of as complementary to them. The structure of the economic organization may rise out of historical considerations and yet cause new technology to be useful only insofar as it is complementary to existing organizational and cultural imperatives. It is this sense which is so hard to capture yet which manifests itself so plainly in the widely varying reactions in the world around us to economic development.

P.A. David, "The Landscape and the Machine," in D. McCloskey (ed.)

Essays on a Mature Economy: Britain After 1840, Princeton, N.J.:

Princeton University Press, 1974, pp. 145-205.